

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original): A method of classifying an input pattern into an associated class, comprising:

extracting data pertaining to preselected features present within the input pattern;

determining, via a first classification technique, a discriminant value for each of a plurality of classes reflecting the relative likelihood that a class is the associated class;

selecting a class with the highest relative likelihood;

generating, via a second classification technique, a confidence value reflective of the a posteriori probability that the selected class is the associated class; and

rejecting the selected class if the determined confidence value is below a predetermined threshold value.

- 2. (Original): A method as set forth in claim l wherein the first classification technique uses a modified Bayesian distance function to compute the discriminant values.
 - (Cancelled)

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- 4. (Original): A method as set forth in claim 3, wherein the second classification technique uses a modified radial basis function to compute the confidence value.
- 5. (Original): A method as set forth in claim 1 wherein the input pattern is a scanned image.
- 6. (Original): A method as set forth in claim 5 wherein each of the plurality of output classes represent a variety of postage stamp.
- 7. (Original): A method as set forth in claim 5 wherein each of the plurality of output classes represent an alphanumeric character.
- 8. (Original): A method as set forth in claim 5 wherein the step of extracting the feature data includes dividing the image into regions and summing the grayscale values of the pixels within each region.
- 9. (Original): A method as set forth in claim 5 wherein the step of extracting the feature data includes defining a discrete number of grayscale ranges and determining the number of pixels within the image that fall within each range.
- 10. (Original): A method as set forth in claim 1 wherein the input pattern is an audio recording.

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- 11. (Original): A computer program product operative in a data processing system for use in classifying an input pattern into an associated class, the computer program product comprising:
- a feature extraction portion for extracting data pertaining to preselected features present within the input pattern;
- a recognition portion for determining, via a first classification technique, a discriminant value for each of a plurality of classes reflecting the relative likelihood that a class is the associated class and for selecting a class with the highest relative probability; and
- a rejection portion for generating, via a second classification technique, a confidence value reflective of the a posteriori probability that the selected class is the associated class and for rejecting the selected class if the determined confidence value is below a predetermined threshold value.
- 12. (Original): A computer program product as set forth in claim 11 wherein the recognition portion makes use of a Bayesian distance classifier to compute the discriminant values.
- 13. (Original): A computer program product as set forth in claim 11 wherein the second classification technique is



partitioned to calculate a confidence value only for a single class.

- 14. (Original): A computer program product as set forth in claim 13 wherein the rejection portion uses a radial basis function to compute the confidence value.
- 15. (Original): A computer program product as set forth in claim 11 wherein the input pattern is a scanned image.
- 16. (Original): A computer program product as set forth in claim 15 wherein each of the plurality of output classes represent a variety of postage stamp.
- 17. (Original): A computer program product as set forth in claim 15 wherein each of the plurality of output classes represent an alphanumeric character.
- 18. (Original): A computer program product as set forth in claim 15 wherein the feature extraction portion divides the image into regions and sums the grayscale values of the pixels within each region.
- 19. (Original): A computer program product as set forth in claim 15 wherein the feature extraction portion defines a discrete number of grayscale ranges and determines the number of pixels within the image that fall within each range.



- 20. (Original): A computer program product as set forth in claim 11 wherein the input pattern is an audio recording.
- 21. (New): A method of classifying an input pattern into an associated class, comprising:

extracting data pertaining to preselected features present within the input pattern;

determining, via a first classification technique, a discriminant value for each of a plurality of classes reflecting the relative likelihood that a class is the associated class;

selecting a class with the highest relative likelihood;

generating, via a second classification technique, a confidence value reflective of the a posteriori probability that the selected class is the associated class, the second classification technique being partitioned to calculate a confidence value only for a single class; and

rejecting the selected class if the determined confidence value is below a predetermined threshold value.

- 22. (New): A method as set forth in claim 21 wherein each of the plurality of output classes represent a variety of postage stamp.
- 23. (New): A method as set forth in claim 21, wherein the second classification technique uses a modified radial basis function to compute the confidence value.

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